

REMARKS

Claims 1-28 are pending, of which claims 1, 16, 23, and 25 are independent. Claims 1-15 are allowed. Claim 22 is indicated as allowable if rewritten. Claims 23-28 are newly added. Care was exercised to introduce no new matter.

Claims 16 and 18-19 are rejected under 35 USC § 102(a) as being anticipated by *Cain* (U.S. Patent 6,697,325, hereinafter *Cain I*). Claim 17 is rejected under 35 USC § 103(a) as being unpatentable over *Cain I* in view of *Elzur* (U.S. Patent 6,427,169). Claim 20 is rejected under 35 USC § 103(a) as being unpatentable over *Cain I* in view of *Yoshiymama* (U.S. Patent 5,461,608). Claim 21 is rejected under USC § 103(a) as being unpatentable over *Cain I* in view of *Cain* (U.S. Patent 6,606,325, hereinafter *Cain II*).

Applicant acknowledges with gratitude the indication that claims 1-15 are allowed and the indication of allowable subject matter in claim 22.

As an initial matter, Applicant respectfully submits that the Office Action fails to specify which *Elzur* and *Yoshiymama* references are utilized in the rejections of claims 17 and 20; however Applicant herein assumes that the Office Action intended U.S. Patent 6,427,169 to *Elzur* and U.S. Patent 5,461,608 to *Yoshiymama*.

Regarding the rejection of independent claim 16 under 35 USC § 102(a) as being anticipated by *Cain I*, Applicant respectfully submits that *Cain I* does not disclose or suggest all of the features recited in claim 16.

For example, claim 16 recites (*emphasis added*):

16. A method of sharing information among a plurality of stations on a communications network, each of the plurality of stations being capable of transmitting and receiving frames over the communications network between any one station and all other stations, comprising periodically broadcasting by one station to all other stations capabilities and status announcements sent in control frames.

The Office Action (page 3, paragraph 3) contends that these features are disclosed by *Cain I* at column 1, lines 30 -33, stating, "each node periodically sends out status information to all of the other nodes." However, at column 1, lines 28-35 *Cain I* states:

The various nodes in the communication network exchange link status information using link state advertisement (LSA)

protocol messages. Specifically, each node periodically tests the communication links to each of its neighbors and sends a LSA protocol message including the link status information to all of the other nodes. Each node computes the routes based upon the link status information received from the other nodes.

Thus, *Cain I* merely mentions that each node “sends” a “LSA protocol message” including the “link status information” to all of the other nodes. There is no mention by *Cain I* of “periodically broadcasting by one station to all other stations capabilities and status announcements sent in control frames” as clearly recited by claim 16, and the Office Action completely fails to explain how these features may be otherwise disclosed by *Cain I*.

In the “Response to Arguments” section the Office Action (page 2, paragraph 1) states:

Regarding claim 16, in the Newton’s Telecomm Dictionary definition which is cited in applicant’s argument, the frame format is defined as also being known as a data packet. In another Cain reference (6606325), which is by the same inventor as the primary reference, in column 1, lines 33-37, it is stated that protocol messages may also be referred to as packets. Hence, the protocol messages of Cain (6697325) are equivalent to packets, which are equivalent to frames.

Applicant respectfully submits that the statement “A frame is a packet” from Newton’s Telecomm Dictionary, which is apparently alluded to by the Office Action, in no way equates a “frame” with a “packet;” there is no hint that it is permissible to conclude that “packets are equivalent to frames” as apparently concluded by the Office Action. Moreover, claim 16 is rejected under 35 USC § 102(a) as being anticipated by *Cain I*, and the Office Action attempts to introduce “another Cain reference” in its contention that “protocol messages may also be referred to as packets” to further attempt to conclude somehow that “packets” are “frames,” which is in fact different from what either the statement from Newton’s Telecomm Dictionary or the second Cain reference disclose. Applicant further respectfully submits that, to anticipate a patent claim, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim. *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383, 58 USPQ2d 1286, 1291 (Fed. Cir. 2001); *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). A prior art reference anticipates a patent claims if it discloses every limitation of the claimed invention,

either explicitly or inherently. *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). “Under the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates.” *MEHL/Biophile Int’l Corp. v. Milgraum*, 192 F.3d 1362, 1365, 52 USPQ2d 1303, 1305 (Fed. Cir. 1999). As “every element and limitation” of claim 16, “arranged as in the claim,” is not found in *Cain I*, the rejection of claim 16 should be withdrawn.

Dependent claims 18-19 are allowable for at least the same reasons as independent claim 16, from which they depend, and these claims are separately patentable on their own merits. For example, regarding the rejection of dependent claim 18 under 35 USC § 102(a) as being anticipated by *Cain I*, Applicant respectfully submits that, in the obviousness rejection of claim 17, the Office Action (page 4, paragraph 4) correctly acknowledges that “the control frame including status flags determinative of ...” is “missing from *Cain*.” The Office Action provides no explanation of how this feature is “missing from *Cain*” with regard to claim 17, but is supposedly disclosed by *Cain I* for an anticipation rejection of claim 18, which depends from claim 17. Applicants therefore respectfully submit that the rejection of claims 18 and 19 should also be withdrawn.

Turning attention to the obviousness rejections of dependent claims 17, 20, and 21, Applicant respectfully submits that none of *Elzur*, *Yoshiymama*, or *Cain II*, individually nor in any reasonable combination, cure the deficiencies of *Cain I* discussed previously with regard to independent claim 16, from which claims 17, 20, and 21 depend. Dependent claims 17, 20, and 21 are allowable for at least the same reasons as independent claim 16, and are separately patentable on their own merits. Therefore, the rejections of claims 16-21 should be withdrawn.

New independent claim 23 recites, “A method comprising: periodically broadcasting by at least one station to other stations on a communications network a control frame including a status announcement and an indicator of a current state of an operability associated with the at least one station, wherein the at least one station is operable to transmit and receive frames over the communications network between the at least one station and the other stations.” New dependent claim 24 recites, “The method of Claim 23 wherein the control frame includes an operation code that is operable to configure a station receiving the control frame with the operation code set to a value indicating a request, to request setting of a timer and to request

transmission of another control frame including another operation code indicating an announcement, at timer expiration by the station receiving the control frame.”

New independent claim 25 recites, “A method comprising: periodically broadcasting by at least one station to other stations on a communications network a control frame configured to include values of one or more of a current transmit flag set, an old transmit flag set, or a current receive flag set, wherein the current transmit flag set value is based on a current state of an operability associated with the at least one station and current status flags for the at least one station, and a first previous state of operability and first previous status flags for the at least one station based on a first timer expiration, the old transmit flag set is based on a second previous state of operability and a second previous status for the at least one station based on a second timer expiration, and the current receive flag set is based on copies of received current transmit flag sets received in frames from the other stations on the communications network.” New dependent claim 26 recites, “The method of Claim 25 wherein one of the other stations receiving the control frame is configured to make operational decisions based on one or more of the received current transmit flag set, old transmit flag set, or current receive flag set.” New dependent claim 27 recites, “The method of Claim 25 wherein the control frame is transmitted by the at least one station based on a change in a current status of the at least one station.” New dependent claim 28 recites, “The method of Claim 25 wherein the control frame includes an operation code that that is operable to configure a station receiving the control frame with the operation code set to a value indicating a request, to request setting of a timer and to request transmission of another control frame including another operation code indicating an announcement, at timer expiration by the station receiving the control frame.”

Applicant respectfully submits that new claims 23-28 are allowable over the applied references.

Accordingly, all pending claims are believed to be in condition for allowance, and such action is requested in the Examiner's next official communication. The Examiner is invited to telephone Applicant's attorney (703-286-5735) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-3521.

Respectfully submitted,

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Date May 25, 2006

By



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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 25th day of May, 2006.

Shellie Bailey


Signature